

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft Louisiana Pollutant Discharge Elimination System Permit No. LA0044865; AI 19953; PER20060001 to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Town of Basile
Town of Basile Wastewater Treatment Facility
Post Office Box 308
Basile, LA 70515
- II. **PREPARED BY:** Todd Franklin

DATE PREPARED: July 6, 2006
- III. **PERMIT ACTION:** reissue LPDES permit LA0044865, AI 19953; PER20060001

LPDES application received: June 1, 2006

EPA has not retained enforcement authority.

Previous LPDES permit effective: November 1, 2001
LPDES permit expired: October 31, 2006

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Basile.
- B. The 2005 Directory of Louisiana Manufacturers and permit application does not indicate the receipt of industrial wastewater into the Town of Basile Wastewater Treatment Facility.
- C. The facility is located at 1239 Bearcat Road in Basile, Acadia Parish.
- D. The treatment facility consists of screening, followed by biological treatment using an oxidation ditch, then final clarification and chlorination.
- E. Outfall 001

Discharge Location: Latitude 30° 28' 20" North
 Longitude 92° 36' 19" West

Description: treated sanitary wastewater

Design Capacity: 0.5 MGD

Type of Flow Measurement which the facility is currently using:

Combination Totalizing Meter / Continuous Recorder

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V. RECEIVING WATERS:

The discharge is into an unnamed ditch; thence into Bayou Nezpique in segment 050301 of the Mermentau River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 050301 of the Mermentau River Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Not Supported	Full	Not Supported	N/A	N/A	N/A	Full

^{1/}The designated uses and degree of support for Segment 050301 of the Mermentau River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 050301 of the Mermentau River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 21, 2005, from Watson (FWS) to Gautreaux (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

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Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Todd Franklin
 Permits Division
 Department of Environmental Quality
 Office of Environmental Services
 P. O. Box 4313
 Baton Rouge, Louisiana 70821-4313

IX.

PROPOSED PERMIT LIMITS:

Subsegment 050301, Bayou Nezpique-headwaters to Mermentau River, is not listed on LDEQ's Final 2004 303(d) list as impaired. However, subsegment 050301 was previously listed as impaired for organic enrichment / low DO, pathogen indicators, suspended solids / turbidity / siltation, nutrients, and phosphorus, for which the below TMDLs have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDLs and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 050301:

Bayou Nezpique Watershed TMDL for Dissolved Oxygen Including WLAs for Nine Treatment Facilities and Bayou Nezpique TMDL for Nutrients

As per the TMDLs referenced above, in order to maintain the summer season (April through November) DO criterion of 3.0 mg/L and the winter season (December through March) DO criterion of 5.0 mg/L, the Town of Basile Wastewater Treatment Facility would be required to meet the following effluent limitations: 5 mg/L CBOD₅ / 2 mg/L NH₃-N / 6 mg/L DO during the summer months of March through November and 10 mg/L CBOD₅ / 7.5 mg/L NH₃-N / 5 mg/L DO during the winter months of December through February. Therefore, these limitations shall apply to this facility. However, please note that the winter limitation for NH₃-N will be 5 mg/L. This is due to toxicity concerns in the receiving waterbody and is consistent with the previous permit.

Bayou Nezpique and Bayou Castor TMDLs for Fecal Coliform

As per the Bayou Nezpique and Bayou Castor Fecal Coliform TMDL, there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL. Therefore, Fecal Coliform effluent limitations will remain as previously permitted in the LPDES permit.

Total Maximum Daily Load (TMDL) for TSS, Turbidity, and Siltation for the Mermentau River Basin

As per the TMDL for TSS, Turbidity, and Siltation for the Mermentau River Basin, point source loads are so small as to be insignificant, and because effective policies are in place to limit TSS discharges, no specific reductions from point sources are required. TSS limits will remain as previously permitted in the LPDES permit.

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Final Effluent Limits:**OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅				Limits are set in accordance with the <i>Bayou Nezpique Watershed TMDL for Dissolved Oxygen Including WLAs for Nine Treatment Facilities and the Bayou Nezpique TMDL for Nutrients</i>
March – November	21	5 mg/l	8 mg/l	
December – February	42	10 mg/l	15 mg/l	
TSS	63	15 mg/l	23 mg/l	As per the <i>Total Maximum Daily Load (TMDL) for TSS, Turbidity, and Siltation for the Mermentau River Basin</i> , no reductions were required for point sources. Therefore, the limitations shall remain as previously permitted under the LPDES permit.
Ammonia-Nitrogen				Limits are set in accordance with the <i>Bayou Nezpique Watershed TMDL for Dissolved Oxygen Including WLAs for Nine Treatment Facilities and the Bayou Nezpique TMDL for Nutrients</i>
March – November	8	2 mg/l	4 mg/l	
December - February	21	5 mg/l	10 mg/l	
Dissolved Oxygen*				Limits are set in accordance with the <i>Bayou Nezpique Watershed TMDL for Dissolved Oxygen Including WLAs for Nine Treatment Facilities and the Bayou Nezpique TMDL for Nutrients</i>
March – November	---	6 mg/l	N/A	
December - February	---	5 mg/l	N/A	

*This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

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Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X.**PREVIOUS PERMITS:**

LPDES Permit No. LA0020125: Issued: November 1, 2001

Expired: October 31, 2006

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Daily Avg.</u>	<u>Daily Max.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
CBOD ₅				
March - November	5 mg/l	10 mg/l	1/week	3-Hour Composite
December - February	10 mg/l	15 mg/l	1/week	3-Hour Composite
TSS	15 mg/l	23 mg/l	1/week	3-Hour Composite
Ammonia-Nitrogen				
March - November	2 mg/l	4 mg/l	1/week	3-Hour Composite
December - February	5 mg/l	10 mg/l	1/week	3-Hour Composite
Dissolved Oxygen				
March - November	6 mg/l minimum	---	1/week	Grab
December - February	5 mg/l minimum	---	1/week	Grab
Fecal Coliform				
Colonies/100 ml	200	400	1/week	Grab
pH	Range (6.0 su - 9.0 su)		1/week	Grab

XI.**ENFORCEMENT AND SURVEILLANCE ACTIONS:****A) Inspections**

A review of the files indicates the following most recent inspection performed for this facility.

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Date – September 9, 2005

Inspector – Douglas Hale, LDEQ

Findings and/or Violations -

1. Records / Reports – Satisfactory – Calibration records are being kept for Dissolved Oxygen and pH. Discharge Monitoring Reports were reviewed for a timeframe of 9/1/04 through 6/30/05.
2. Operations and Maintenance – Satisfactory – The town has made arrangements with the power provider CLECO to be a top priority in the event of a power outage. An alarm system has been installed to alert operators of power outages.
3. Self-Monitoring – Satisfactory – Composite samples are now collected after 10:00 a.m.

B) Compliance and/or Administrative Orders

A review of the files indicates the following most recent enforcement action administered against this facility:

LDEQ Issuance:

Compliance Order

Enforcement Tracking No. WE-C-01-0554

Date Issued – August 28, 2002

Findings of Fact:

1. The Respondent owns and/or operates a publicly owned treatment works located on Bearcat Road in Basile, Evangeline Parish, Louisiana. NPDES permit LA0044865 was issued by the EPA with an effective date of June 1, 1995, and expired on May 31, 2000. In accordance with the assumption of the NPDES program, NPDES permit LA0044864 became LPDES permit with the same expiration date. A LPDES permit application was received on October 9, 2000. The LPDES permit has not been administratively continued. The LPDES permit authorized the Respondent to discharge treated sanitary wastewater from its facility into an unnamed ditch, thence into Bayou Nezpique, both waters of the state. Respondent was issued LPDES permit LA0044865 with an effective date of November 1, 2001, and which expires on September 31, 2006
2. A file review on July 18, 2001, revealed that the Respondent continued to submit DMRs after the expiration of the LPDES permit LA0044865, which indicated continued discharges from the facility to waters of the state.
3. An inspection on September 9, 2000, and a subsequent file review on July 18, 2001, revealed that the Respondent failed to submit an application for the renewal of its LPDES permit 180 days prior to the expiration date.
4. A file review on June 3, 2002, of the DMRs revealed numerous violations. From November 1999 through April 2002, there were 25 BOD₅ effluent violations, 29 TSS effluent violations, and 2 fecal coliform effluent violations.
5. An inspection on July 24, 2001, revealed the following deficiencies:
 - A. The town has only one trained operator who works in the sewage treatment plant, and is also responsible for the town drinking water.
 - B. The clarifier has an internal problem which causes a large

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bubbling of water to occur in the central cone area every 30 to 60 seconds. Also, the ditch was septic due to inadequate sludge washing and lack of oxygen. The clean out pipe for the sludge beds was cracked and leaking. Foam and heavy solids were found in the chlorine contact chamber.

- C. The Respondent failed to install and maintain the flow measuring device to ensure that the accuracy of the measured flow was consistent with the accepted capability of the device. Specifically, the flow meter chart pegs out at times of peak flow.
6. File review on June 3, 2002, of the DMRs revealed numerous effluent violations since the expiration of LPDES permit LA0044865. From June 2000 through October 2001, there were 37 BOD₅ effluent violations, 40 TSS effluent violations, and 8 fecal coliform effluent violations.
- 7.

Order:

1. To immediately take any and all steps necessary to meet and maintain compliance with LPDES permit LA0044865.
2. Respondent shall accomplish the following tasks and comply with the following schedule of activities:

ACTIVITY

DUE DATE

- | | |
|---------------------------------------|----------------|
| 1. Commence Construction Improvements | November 2003 |
| 2. Complete Construction Improvements | September 2004 |
| 3. Attain Final Permit Compliance | November 2004 |

The Respondent shall submit construction progress reports during the months of June and December of each year, until completion of the proposed improvements. Within 14 days of any due date specified in the schedule above, the Respondent shall submit a certification of compliance or non-compliance with that activity. If a Respondent reports a non-compliance of a schedule event, the certification shall include a discussion of the cause of the delay, an anticipated date of completion and a discussion of any impairment of a subsequent due date.

3. To submit to the Enforcement Division a complete written report that shall include a detailed description of the circumstances of the cited violations and the actions take to achieve compliance with this Compliance Order.

C) DMR Review

A review of the discharge monitoring reports for the period beginning March 2004 through March 2006 has revealed the following violations (Please note that the DMR for the month of February 2006 was missing from the file):

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
TSS, Monthly Avg.	001	May 2004	63 lbs/day	235.60 lbs/day
Fecal Coliform, Weekly Avg.	001	May 2005	400 col./100 ml	1,000 col./100 ml
DO, Monthly Avg.	001	November 2005	6 mg/l minimum	5.76 mg/l

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TSS, Weekly Avg.	001	January 2006	23 mg/l	40 mg/l
DO, Monthly Avg.	001	March 2006	6 mg/l minimum	5.71 mg/l

XII. ADDITIONAL INFORMATION:

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.5 MGD.

Effluent loadings are calculated using the following example:

$$\text{CBOD}_5: 8.34 \text{ lb/gal} \times 0.5 \text{ MGD} \times 10 \text{ mg/l} = 42 \text{ lb/day}$$

At present, the Monitoring Requirements, Sample Types, and Frequency of Sampling as shown in the permit are standard for facilities of flows between 0.50 and 1.00 MGD.

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Continuous	Recorder
CBOD ₅	1/week	3 Hr. Composite
Total Suspended Solids	1/week	3 Hr. Composite
Ammonia-Nitrogen	1/week	3 Hr. Composite
Dissolved Oxygen	1/week	Grab
Fecal Coliform Bacteria	1/week	Grab
pH	1/week	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report each year for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

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The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

XIII**TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV**REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Basile, Town of Basile Wastewater Treatment Facility, June 1, 2006.